

FIG.1A

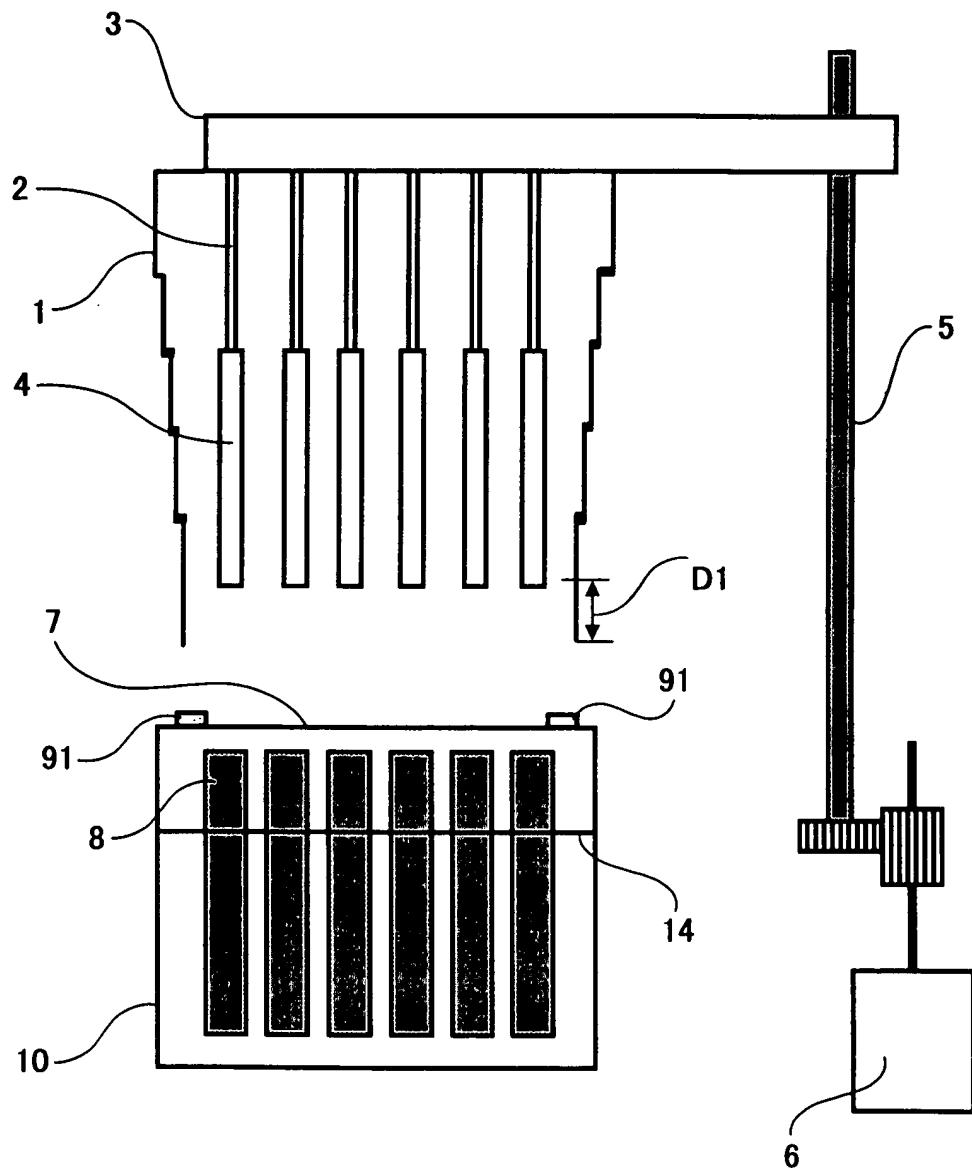


FIG.1B

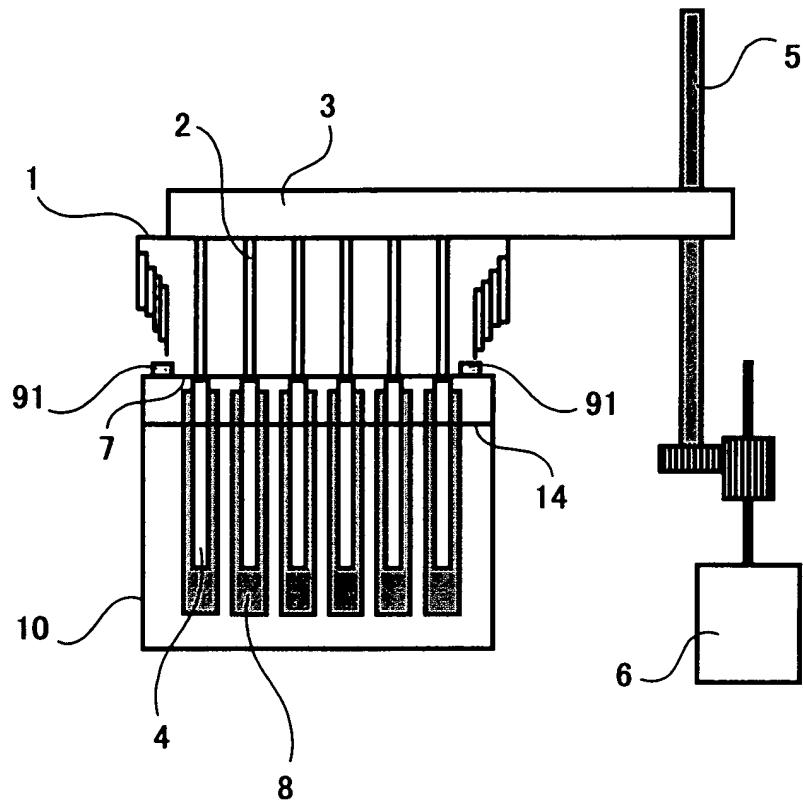


FIG.1C

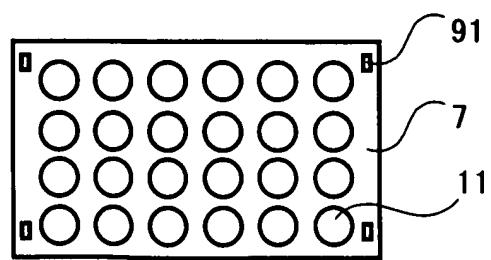


FIG. 2

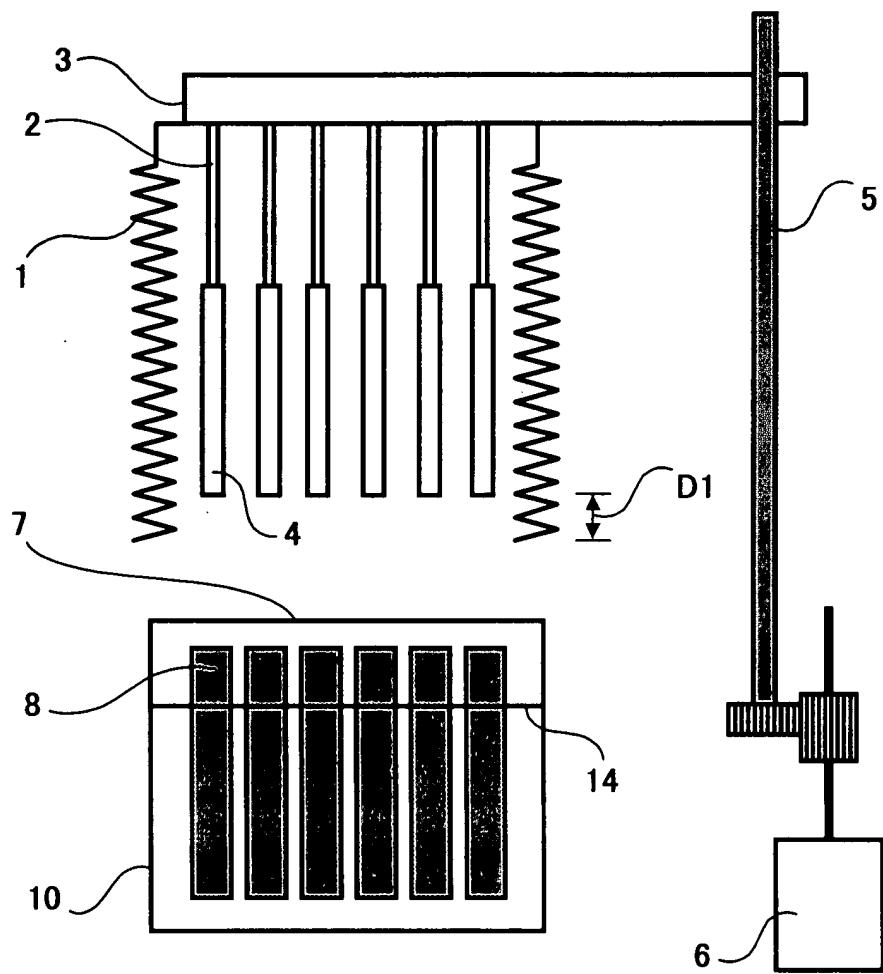


FIG. 3A

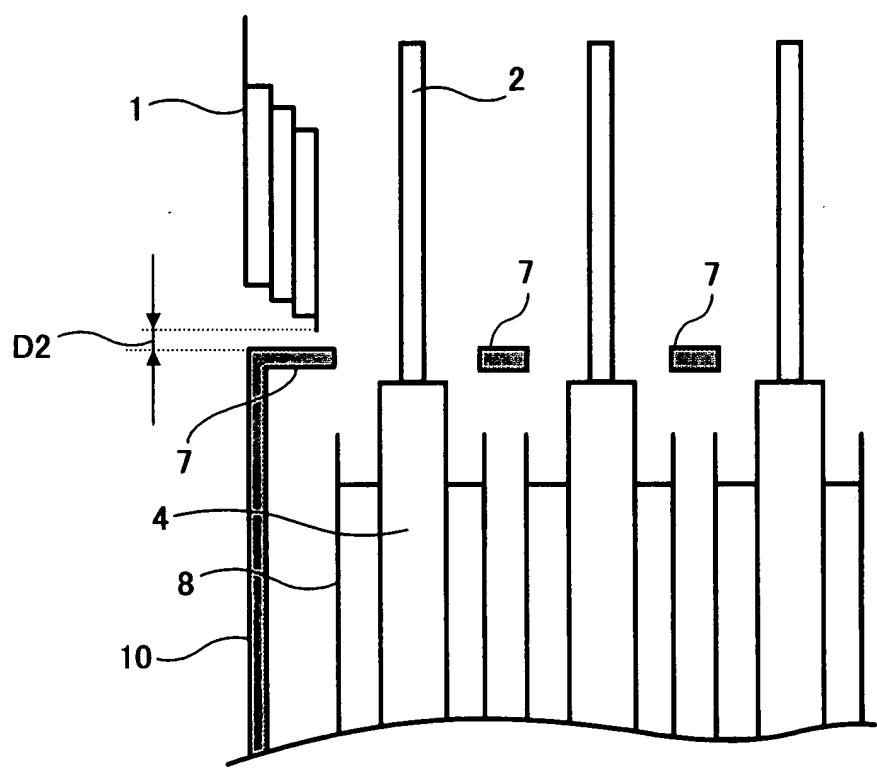


FIG. 3B

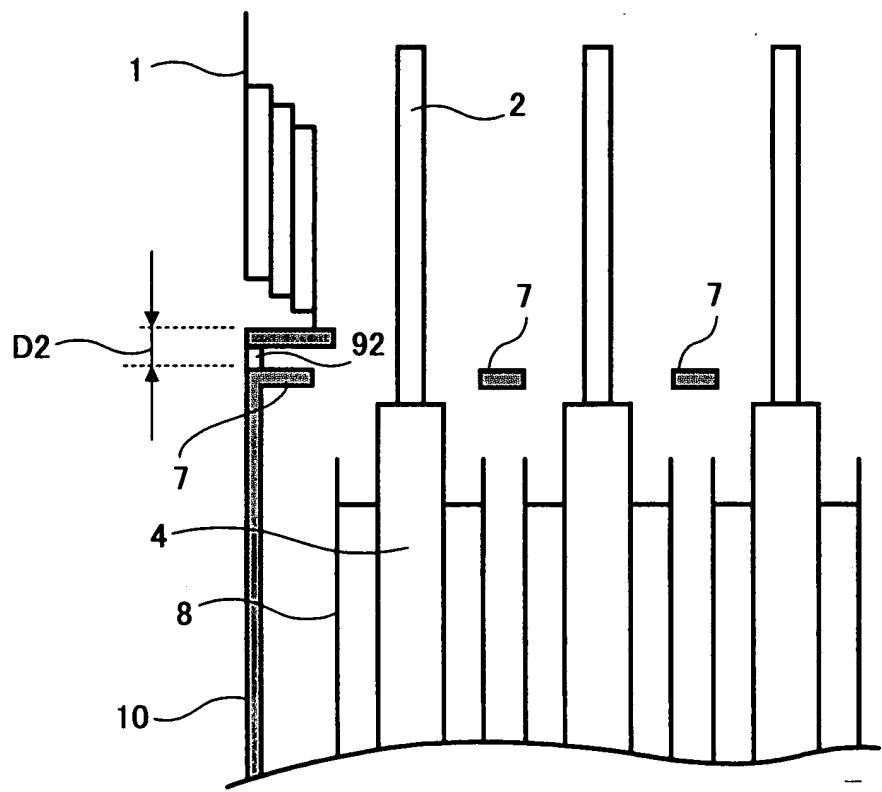


FIG. 4

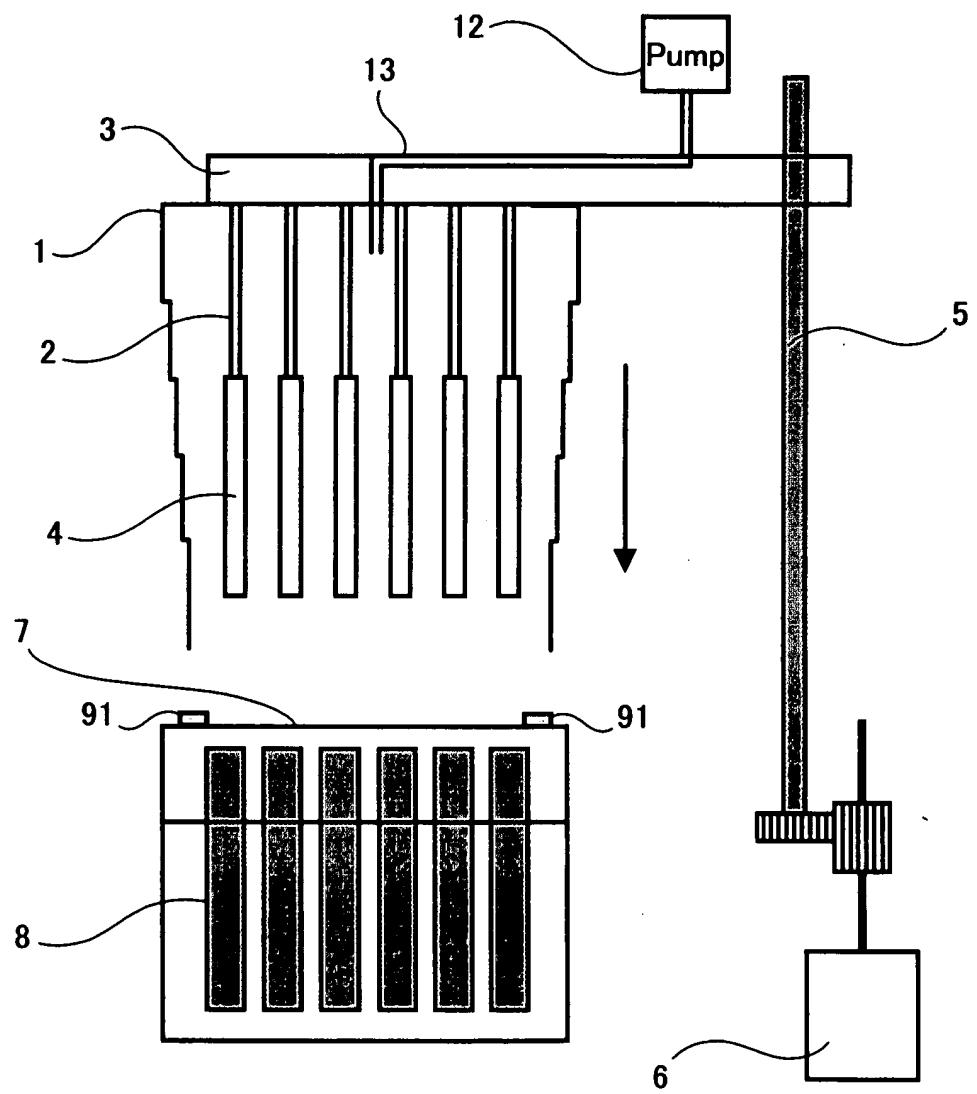


FIG. 5

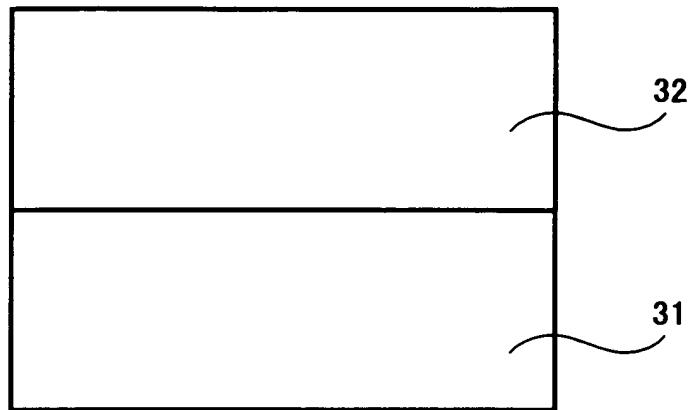


FIG. 6

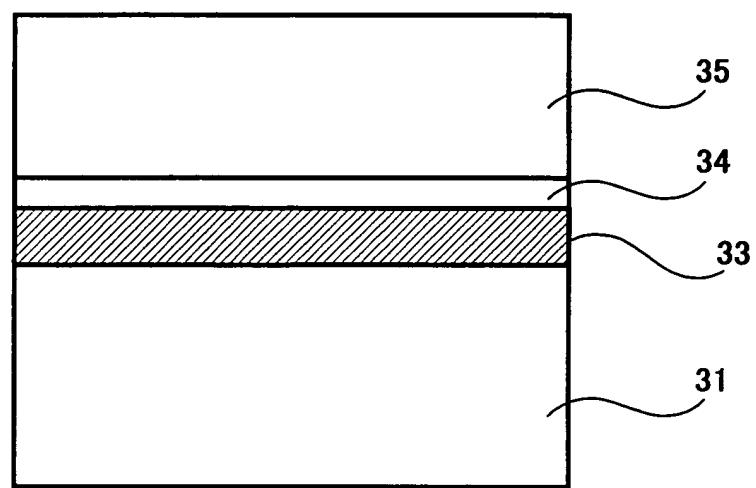


FIG. 7

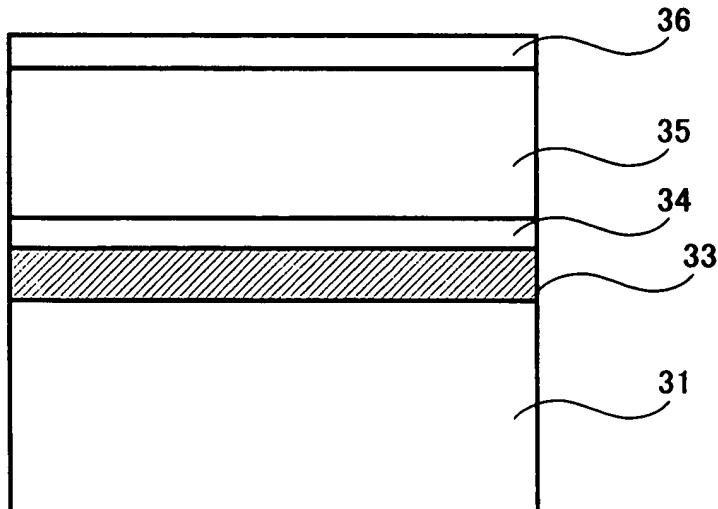


FIG. 8

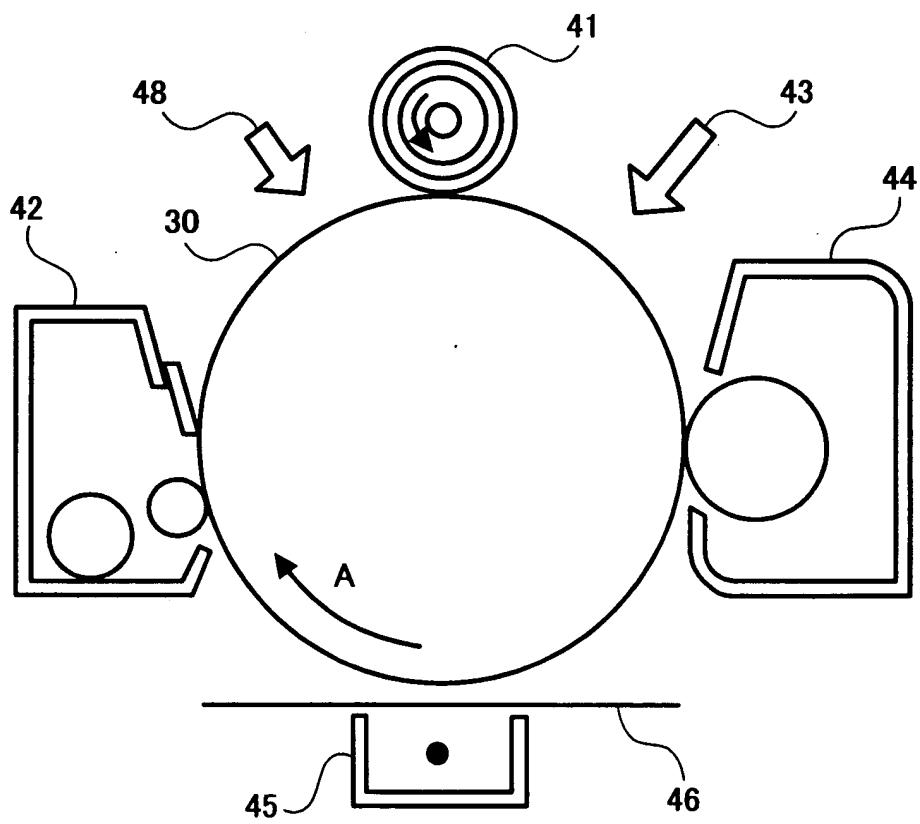


FIG. 9

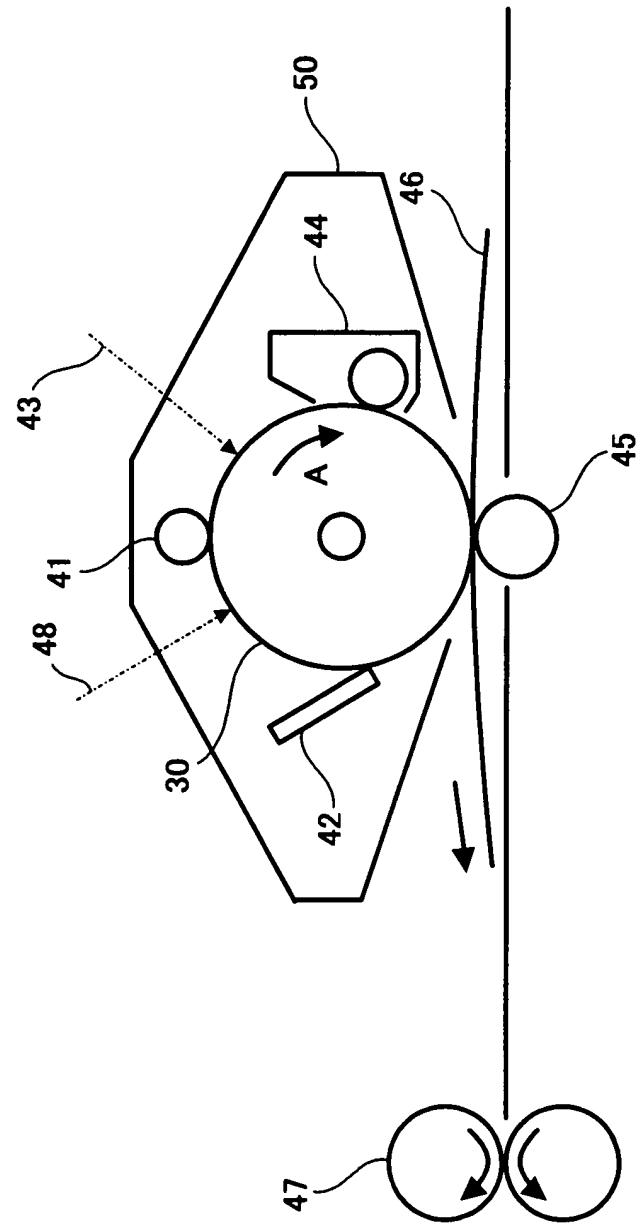


FIG.10

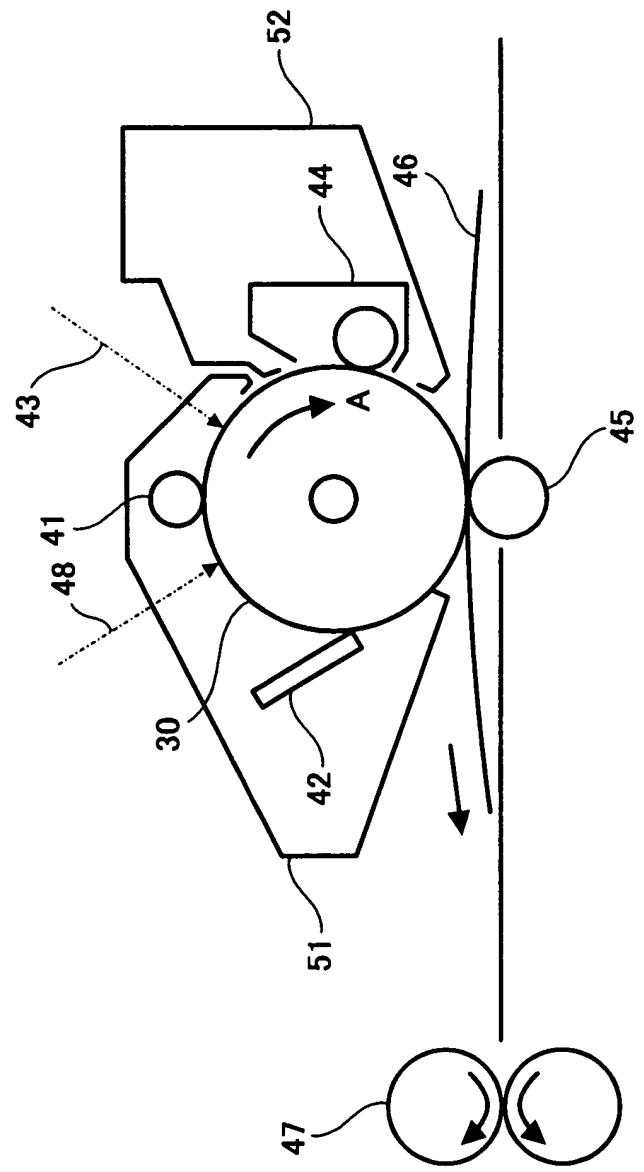


FIG.11

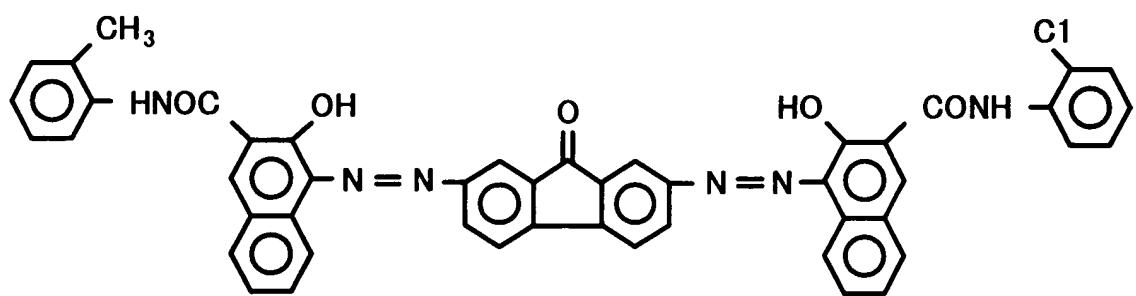


FIG.12

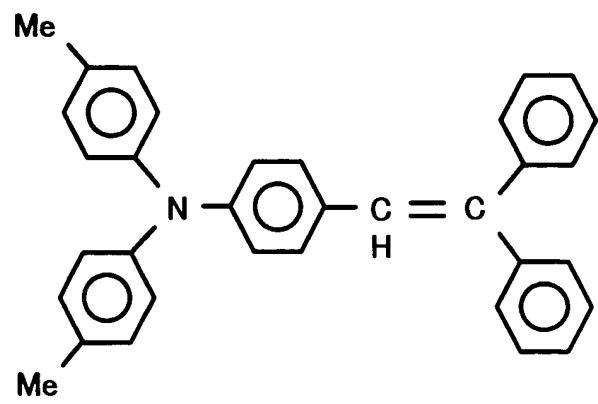


FIG. 13

	D1/mm	D2/mm
EXAMPLE 1-1	0	0
EXAMPLE 1-2	20	0
EXAMPLE 1-3	50	0
EXAMPLE 1-4	100	0
EXAMPLE 1-5	20	5
EXAMPLE 1-6	20	25
EXAMPLE 1-7	20	50
EXAMPLE 1-8	20	60
COMPARATIVE EXAMPLE 1-1	-10	0
COMPARATIVE EXAMPLE 1-2	-30	0

FIG. 14

	DIFFERENCE R(μm) BETWEEN MAX. & MIN. DISTANCE FROM TOP		THICKNESS DISTRIBUTION	DEGREE OF SLOPE (50mm~ 290mm) FILM THICKNESS	IMAGE ESTIMATION	
	50mm	170mm			290mm	HALFTONE IMAGE
EXAMPLE 1-1	0.15	0.45	1.23	SLOPE IN AXIAL DIRECTION	3.2 μm	<input type="radio"/>
EXAMPLE 1-2	0.11	0.33	0.53	SLOPE IN AXIAL DIRECTION	3.1 μm	<input type="radio"/>
EXAMPLE 1-3	0.09	0.33	0.22	SLOPE IN AXIAL DIRECTION	3.5 μm	<input type="radio"/>
EXAMPLE 1-4	0.08	0.15	0.28	SLOPE IN AXIAL DIRECTION	3.4 μm	<input type="radio"/>
EXAMPLE 1-5	0.09	0.12	0.23	NO SLOPE	0.3 μm	<input type="radio"/>
EXAMPLE 1-6	0.12	0.19	0.25	NO SLOPE	0.2 μm	<input type="radio"/>
EXAMPLE 1-7	0.43	0.33	0.28	NO SLOPE	0.3 μm	<input type="radio"/>
EXAMPLE 1-8	1.29	0.75	0.25	NO SLOPE	0.3 μm	<input type="radio"/>
COMPARATIVE EXAMPLE 1-1	0.13	0.73	2.3	SLOPE IN AXIAL DIRECTION	8.2 μm	IRREGULAR DENSITY AT BOTTOM
COMPARATIVE EXAMPLE 1-2	0.22	1.58	3.1	SLOPE IN AXIAL DIRECTION	9.1 μm	IRREGULAR DENSITY FROM CENTER TO BOTTOM

FIG. 15

IMAGE ESTIMATION			
DIFFERENCE R(μm) BETWEEN MAX. & MIN.	THICKNESS DISTRIBUTION	DEGREE OF SLOPE (50mm~290mm)	HALFTONE IMAGE
DISTANCE FROM TOP	50mm 170mm 290mm	50mm	TRIMMED IMAGE
EXAMPLE 2-1	0.35 0.55	2.16 SLOPE IN AXIAL DIRECTION	5.2 μm ○ IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-2	0.44 0.57	1.62 SLOPE IN AXIAL DIRECTION	4.8 μm ○ LIGHT IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-3	0.47 0.62	1.58 SLOPE IN AXIAL DIRECTION	4.6 μm SHEAR AT TOP ○ LIGHT IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-4	0.53 0.57	1.55 SLOPE IN AXIAL DIRECTION	4.9 μm ○ LIGHT IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-5	0.44 0.58	1.73 NO SLOPE	2.2 μm ○ LIGHT IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-6	1.59	0.73 0.25 NO SLOPE	2.3 μm ○ LIGHT IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-7	1.73	0.33 0.28 NO SLOPE	1.9 μm ○ LIGHT IRREGULAR DENSITY AT BOTTOM
EXAMPLE 2-8	2.5	1.2 0.53 NO SLOPE	2.7 μm ○ HEAVY IRREGULAR DENSITY FROM TOP TO CENTER

FIG.16

DIFFERENCE R(μm) BETWEEN MAX. & MIN.		THICKNESS DISTRIBUTION		DEGREE OF SLOPE (50mm~ 290mm) FILM THICKNESS	IMAGE ESTIMATION	
DISTANCE FROM TOP		50mm	170mm	290mm	TRIMMED IMAGE	HALFTONE IMAGE
EXAMPLE 3-1	0.13	0.23	1.23	SLOPE IN AXIAL DIRECTION	2.9 μm	<input type="radio"/>
EXAMPLE 3-2	0.11	0.22	0.49	SLOPE IN AXIAL DIRECTION	3.1 μm	<input type="radio"/>
EXAMPLE 3-3	0.11	0.17	0.22	SLOPE IN AXIAL DIRECTION	2.8 μm	<input type="radio"/>
EXAMPLE 3-4	0.12	0.12	0.28	SLOPE IN AXIAL DIRECTION	2.9 μm	<input type="radio"/>
EXAMPLE 3-5	0.09	0.16	0.3	NO SLOPE	0.9 μm	<input type="radio"/>
EXAMPLE 3-6	0.1	0.22	0.29	NO SLOPE	0.7 μm	<input type="radio"/>
EXAMPLE 3-7	0.38	0.35	0.3	NO SLOPE	0.6 μm	<input type="radio"/>
EXAMPLE 3-8	0.43	0.37	0.25	NO SLOPE	0.7 μm	<input type="radio"/>